

APPENDIX 4**GLOSSARY OF ACRONYMS AND TECHNICAL TERMS****Acronyms**

BDR	Biological Degradation Rate
BOD	Biochemical Oxygen Demand
CASRN	Chemical Abstracts Services Registry Number
CBI	Confidential Business Information
CFR	Code of Federal Regulations
COD	Chemical Oxygen Demand
MLSS	Mixed Liquor Suspended Solids
MLVSS	Mixed Liquor Volatile Suspended Solids
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
OMB	Office of Management and Budget
OSW	Office of Solid Waste
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
TOC	Total Organic Carbon
TOD	Total Oxygen Demand
USC	United States Code

Technical Terms

For the purpose of this questionnaire, technical terms used in this questionnaire are defined as follows:

Aquifer means a geologic formation, group of formations, or portion of a formation that yields usable quantities of water to wells or springs.

Biochemical oxygen demand is a measure of the biodegradable organic content of waste. Biochemical oxygen demand means the amount of dissolved oxygen used for respiration during the aerobic metabolism of an energy source (e.g. organic matter) by acclimated microorganisms.

Biological degradation rate means the rate at which a chemical degrades due to biological processes such as metabolism. The biological degradation rate should not include degradation due to non-biological processes such as hydrolysis or photolysis.

Biomass means the mass of a heterogeneous microbial population in waste water, such as an activated sludge.

Biomass concentration means the dry weight of biomass per unit volume of reaction fluid.

Cell yield coefficient is a measure of biological productivity that means the mass of cells produced per unit of substrate removed.

Chemical oxygen demand is a measure of the total organic content of waste, both degradable and refractory. Chemical oxygen demand means the amount of oxygen required for maximum oxidation of the organic matter in a sample of the waste.

Density means the mass of wastewater and/or sludge per unit volume.

Disposal means discharge, deposit, injection, or placing of a waste into or on any land or water so that the waste or its constituents may enter the environment, be emitted into the air or discharged into any waters, including groundwaters.

Effluent means the wastewater flow exiting the surface impoundment via an engineered structure that may be either a pipe or a channel, or the physical removal of sludge.

Hydraulic residence time means the average amount of time wastewater spends in the impoundment. Hydraulic residence time also is known as “hydraulic detention time” or “hydraulic retention time”. Hydraulic residence time is reported in terms of time, and can be computed by dividing the impoundment volume (in units of volume) by the volumetric flow rate through the impoundment (in units of volume per time).

Influent means the wastewater flow entering the surface impoundment.

Leachate means any liquid that has passed through or drained through the sides and/or bottom of the surface impoundment (other than that drained through an outfall structure). Leachate also means any soluble, suspended or miscible materials that may be contained in that liquid.

Leak detection system means a system capable of detecting a downward or lateral release of any waste constituents or leachate from the surface impoundment.

Liner means a continuous layer of natural or man-made materials, emplaced beneath and/or on the sides of a surface impoundment, that restricts the downward and/or lateral release of waste, waste constituents, or leachate from the surface impoundment. The liner does not include naturally occurring materials (such as a naturally occurring clay layer) that, although effective in controlling the release of leachate from the surface impoundment, were not emplaced intentionally for that purpose.

Liner failure means the development of one or more physical disruptions in the liner's continuity (e.g., cracks or tears), or the presence of leachate underneath the liner.

Mixed liquor suspended solids means the suspended (nonfilterable) solids concentration in the mixture of wastewater and suspended culture that is used in activated sludge processes.

Mixed liquor volatile suspended solids means the volatile suspended (nonfilterable) solids concentration in the mixture of wastewater and suspended culture that is used in activated sludge processes.

Nonhazardous waste means waste that is not classified as hazardous waste according to the federal regulations at 40 CFR Part 261.

pH means the negative logarithm of the hydrogen ion concentration of a liquid, which indicates the relative strength of acidity and alkalinity.

Reference time period means the time period from June 1, 1990 to the present, or (if this surface impoundment has permanently ceased receiving wastes) the period from June 1, 1990 to the date the impoundment permanently ceased receiving wastes.

Saturated zone is a subsurface zone in which the pore spaces are full of water, but the zone does not provide useable quantities of water.

Sludge means any solid, semi-solid, or liquid waste containing 5 weight percent or more solids, that is generated in the course of treating or managing wastewater.

Storage means the containment of waste, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal.

Surface impoundment means a natural topographic depression, artificial excavation, or dike arrangement with the following characteristics:

- It is used primarily for storage, treatment, or disposal of wastes in the form of fluids.
- It may be constructed above, below, or partially in the ground.
- It may or may not have a permeable bottom and/or sides potentially allowing release of its contents.
- It has a surface dimension greater than its depth (for example, it is not an injection well).

Tank means a stationary device:

- designed to contain an accumulation of wastewater, and
- constructed from non-earthen materials (e.g., wood, concrete, steel, plastic) that provide the primary means of structural support.

Total organic carbon means the amount of carbon in the organic matter in a sample.

Total oxygen demand means the amount of oxygen required to oxidize both the organic and inorganic matter in a sample under specific conditions.

Total solids means the sum of dissolved (filterable) and suspended (nonfilterable) solids.

Total suspended solids means all solids that are suspended in a sample of waste but are not dissolved; total suspended solids are identified as the portion of a waste sample that does not pass through a glass fiber filter (i.e., nonfilterable).

Treatment means any method, technique, or process (including neutralization), designed to change the physical, chemical, or biological character or composition of the waste.

Viscosity means the measure of the wastewater's resistance to flow when acted upon by an external force.

Wastewater means a waste liquid that contains less than 5 percent solids, by weight, and that results from manufacturing, processing, or use of a raw material, intermediate product, finished product, by-product, or waste product, or that results from cleaning or washing activities.